

# Protecting your baby from low blood glucose

Information for parents





You have been given this leaflet because your baby is at increased risk of having low blood glucose (also called low blood sugar or hypoglycaemia).

# What is low blood glucose?

Babies who are small, premature, unwell at birth, or whose mothers are diabetic or have taken certain medication (betablockers), may have low blood glucose in the first few hours and days after birth, and it is especially important for these babies to keep warm and feed as often as possible in order to maintain normal blood glucose levels.

If your baby is in one of these 'at risk' groups, it is recommended that they have some blood tests to check their blood glucose level. Extremely low blood glucose if not treated, can cause brain injury resulting in developmental problems. If low blood glucose is identified quickly, it can be treated to avoid any harm to your baby.

# **Blood glucose testing**

Your baby's blood glucose is tested by a heel-prick blood test. This is a very quick and simple procedure and only a very small amount of blood is needed. Some babies will not be disturbed by the procedure; others may become a little unsettled. You can comfort your baby by holding them in skin-to-skin contact during the procedure and by offering a feed immediately afterwards. The first blood test should be done before the second feed (2-4 hours after birth), and repeated until the blood glucose levels are stable.

You and your baby will need to stay in hospital for the blood tests. You will know the result of the test straight away.

# How to avoid low blood glucose

### **Express your milk during pregnancy**

You might want to think about expressing your milk towards the end of your pregnancy. An ideal time to express is if you are admitted to hospital for Induction of Labour. You will then have some milk available in case your baby is sleepy and not feeding well immediately after birth. Talk to your midwife, she will be able to give you information and support with this.

### Skin-to-skin contact

Skin-to-skin contact with your baby on your chest helps keep your baby calm and warm and helps establish breastfeeding. During skin-to-skin contact your baby should wear a hat and be kept warm with a blanket or towel.

### Keep your baby warm

Put a hat on your baby for the first few days while he or she is in hospital. Keep your baby in skin-to-skin contact on your chest positioned so his/her face is facing you so that you can observe any change in colour or breathing pattern, baby should be covered with a blanket. If baby is settled in the cot then cover with blanket.

## Feed as soon as possible after birth

Ask a member of staff to support you with feeding until you are confident, and make sure you know how to tell if breastfeeding is going well, or how much formula to give your baby.

### Feed as often as possible in the first few days

Whenever you notice 'feeding cues' which include rapid eye movements under the eyelids, mouth and tongue movements, body movements and sounds, sucking on a fist, offer your baby a feed. Don't wait for baby to cry - this can be a late sign of hunger.

Feed for as long or as much as your baby wants. To ensure your baby gets as much milk as possible

Feed as often as baby wants, but do not leave your baby more than three hours between feeds

If your baby is not showing any feeding cues yet, hold him/ her in skin-to-skin and start to offer a feed about three hours after the start of the previous feed.

### **Express your milk (colostrum)**

If you are breastfeeding and your baby struggles to feed, try to give some expressed breastmilk. A member of staff will show you how to hand express your milk, or watch the UNICEF hand expressing video www.unicef.org.uk/babyfriendly/babyfriendly-resources/breastfeeding-resources/hand-expression-video/. If possible it is good to have a small amount of expressed milk saved in case you need it later, so try and express a little extra breastmilk between feeds. Ask your midwife to store your expressed milk.

Don't hesitate to tell staff you are worried about your baby If your baby appears to be unwell, this could be a sign that they have low blood glucose. As well as doing blood tests, staff will observe your baby to check he/she is well, but your observations are also important, as you are with your baby all

the time so know your baby best. It is important you tell staff if you are worried that there is something wrong with your baby, as parents' instincts are often correct.

# The following are signs that you baby is well

### Is your baby feeding well?

In the first few days your baby should feed effectively at least every three hours, until blood glucose is stable, and then at least eight times in 24 hours. Ask a member of staff how to tell if your baby is attached and feeding effectively at the breast, or how much formula he/she needs. If your baby becomes less interested in feeding then before, this may be a sign that they are unwell and you should raise this with a member of staff.

# Is your baby warm enough?

Your baby should feel slightly warm to touch, although hands and feet can sometimes feel a little cooler. If you use a thermometer the temperature should be between 36.5°C and 37°C inclusive.

### Is your baby alert and responding to you?

When your baby is awake, he/she will look at you and pay attention to your voice and gestures. If you try to wake your baby, they should respond to you in some way.

## Is your baby's muscle tone normal?

A sleeping baby is very relaxed, but should still have some muscle tone in their body, arms and legs which should respond to your touch. If your baby feels completely floppy, with no muscle tone when you lift their arms or legs, or if your baby is

making strong repeated jerky movements, this is a sign they may be unwell. It can be normal to make brief, light, jerky movements. Ask a member of the team if you are not sure about your baby's movements.

# Is your baby's colour normal?

Look at the colour of the lips and tongue - they should be pink

### Is your baby breathing easily?

Babies' breathing can be quite irregular, sometimes pausing for a few seconds and then breathing very fast for a few seconds. If you notice your baby is breathing very fast for a continuous period (more than 60 breaths per minute), or seems to be struggling to breathe with very deep chest movements, nostrils flaring or making noises with each breath out - this is not normal.

# Who to call if you are worried

- In hospital, inform any member of the clinical staff.
- At home, call your community midwife and ask for advice.
- Maternity Assessment can be contacted 24 hours a day for advice, LGI 0113 392 6731 / St James 0113 206 5871.
- 999 if baby unresponsive.



# What happens if your baby's blood glucose is low?

If the blood glucose test result is low, your baby should feed as soon as possible and provide skin- to-skin contact. If the level is very low the neonatal team may advise urgent treatment to raise the blood glucose and this may require immediate transfer to Neonatal Unit

Another blood glucose test will be done before the next feed within 2-4 hours

If you are breastfeeding and your baby does not breastfeed straight away, a member of staff will review your baby to try and work out why. If they are happy that your baby is well they will support you to hand express your milk and give it to baby by oral syringe. If your baby has not breastfed and you have been unable to express any milk, you will be advised to offer infant formula.

Staff may also advise a dose of dextrose gel as part of the feeding plan as this can be an effective way to bring your baby's blood glucose level up.

If you are breastfeeding and you have been advised to give some infant formula this is most likely for one or two feeds only. You should continue to offer breastfeeds and will be supported to express milk as often as possible to ensure your milk supply is stimulated.

Very occasionally if babies are too sleepy or unwell to feed, or if the blood glucose is still low after feeding, your baby may need to go to the neonatal unit. Staff will explain any treatments that might be needed. In most cases, low blood glucose quickly improves within 24-48 hours and you and your baby will be back together.

# Going home with baby

It is recommended that your baby stays in hospital for 24 hours after birth. After 24 hours, if your baby's blood glucose is stable and he/she is feeding well you will be able to go home.

Before you go home, make sure you know how to tell if your baby is getting enough milk. A member of staff will explain how many wet and dirty nappies you should see each day and how the colour of the dirty nappies should change.

It is important to make sure your baby feeds well at least eight times in 24 hours, most babies will feed more often than this.

There is no need to continue waking your baby to feed every 2-3 hours, as long as baby is feeding on demand, and is having at least eight feeds in 24 hours. Your baby will demonstrate feeding cues and it is recommended that you feed your baby in response to these. Speak to your midwife if you need any help recognising your baby's cues. Once you are home no special care is needed. As with all new born babies, you should continue to look for signs that your baby is well and seek medical advice if you are worried about your baby.